THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. Lxxxviii.] Thursday, June 12, 1873. [No. 24.

Original Communications.

THE INFLUENCE OF HYGIENIC CONDITIONS ON THE MORTALITY OF CITIES.

By Henry O. Marcy, M.D. Harv.

Read at the Annual Meeting of the Middlesex South District Medical Society.

Statistical information is to be regarded as of great value, and certain questions may be settled by such aid, which could in no other way be answered.

Last autumn, when the periodical excitement over the slaughtering establishment of John P. Squires and the Miller River nuisance was at high tide, believing that the surroundings complained of, and the entire absence of sanitary care and precaution in whole neighboring districts must increase the mortality rates (although, as may seem strange, it was a question over which medical gentlemen practising in these localities had different opinions), Dr. A. L. Norris, of East Cambridge, and myself, were induced to carefully examine the records, and the following table of facts was then presented, which I have felt are of sufficient interest to our profession to offer them here to your notice.

The period of time under observation is five years, commencing August, 1867, and ending August, 1872.

The basis of population is taken from the census of 1870, which (given a uniform increase in the population for five years) would afford a nearly mean average in numbers. They are as follows:—

	Population, 1870.	Deaths during five years.	No. of inhab. to one death per an.
Ward I.,	6,909	552	62·66
" II.,	10,389	1,267	41
" III.,	9,178	1,134	40·45
" IV.,	8,865	728	60·90
" V.,	4,311	376	56
City total,	39,652	4,057	48·80

This is an annual mortality of between 20 and 21 to the thousand of inhabitants and differs only a slight fraction from the mortality rates of the County of Middlesex. Ward lines, unfortunately, prove arbitrary divisions, not best arranged for our purpose, but give us the only data of population. Ward III. comprises East Cambridge, and

Ward II. includes the territory lying south and west to Main Street. Perhaps one half of Ward II. may be considered as healthily located as any part of the city, while the hill-top of Ward III., or East Cambridge, is dry, well drained and, except in its surroundings, is unexceptional as regards position.

These two wards contain 19,556 inhabitants, and suffered a loss from death during the five years of 2,401. The remaining portion of the city contains a population of 20,085, and suffered a loss from death during the same period, of 1,656, showing an excess of deaths with one fortieth less population of 745; an excess of over twenty per cent.

Comparing Ward I., known as Harvard Square or Old Cambridge, with Ward III., East Cambridge, the contrast will be seen to be still greater.

No. of inhabitants to one death per annum, 62·66, Ward I.
" " " " " " " 45·45, " III.

an excess of over twenty-two per cent.

A further analysis of the diseases producing death show the diseases to be such as, *a priori*, would have been supposed prevalent in undrained localities with such surroundings.

Whole number of deaths from cholera infantum for five years, in the city, 463. In East Cambridge, comprising about 22 per cent. of the population, 133, or 35 per cent. of the whole number.

Whole number, scarlet fever, 187. In East Cambridge 59, or 33 per cent. Typhoid fever, 172. In East Cambridge 44, or 25 per cent. Diseases of the lungs, 940. In East Cambridge 282, or 30 per cent.

Dr. E. White, of Somerville, who also rendered desirable assistance in the tedious labor of comparing these tables, kindly prepared for me the following exhibit, illustrating much more strongly the contrasts of location and their effect upon disease.

The district under observation is included between Sixth St. on the east, and Windsor on the west; Miller's River on the north, and Charles River south. In the absence of definite knowledge as to the number of inhabitants in this limit, by a careful comparison of the opinions of those best able to judge, the population was supposed to be about 3,000, probably a large estimate. A glance at the map will show almost this entire district to be flat, chiefly marsh originally, and doubtfully in some instances improved by occupation, with very imperfect or no drainage; and in this are situated several immense slaughtering establishments flanked by rendering, bone-boiling and soap-making establishments, to say nothing of other occupations detrimental to the public health. It is doubtful if a worse condition of surroundings could have been found in the vicinity of Boston than along the Somerville line.

It will be remembered that July and August of last year were very sickly months, and the whole number of deaths for this period in Cambridge was 291. The number in the above described district was 55, or over one sixth of the whole number, while this district probably contains less than one fifteenth part of the population of the city. This frightful rate of mortality, continued throughout the year, would reduce the average duration of life within these limits to about *ten years,* while the death rate, continued throughout the year in the remaining portion of the city, would give nearly *forty years,* or almost four times greater in one section than in the remaining portion of the city.

These last tables, as will be seen, are merely speculative, having an estimated basis upon which to draw conclusions, and yet I cannot believe they go wide of the facts, and are probably within the limit of truth.

They are no more difficult to believe than similar statistics, carefully drawn by unprejudiced observers from different sections of other cities. I remember a report made by Dr. Edward H. Clarke, of Boston, some years since, comparing the so-called Broad Street district, then reeking with filth and crowded to excess, with the Beacon Hill district; here the mortality rates were, in the first, six times the greater, and revealed the astonishing mortality of one death annually in every ten of its inhabitants. To show the ease with which those unfamiliar with statistics may be misled or mislead others, I would here refer to the closing argument by Mr. H. W. Muzzey, attorney for the defendant, before the Mayor and Board of Aldermen, which was printed and widely circulated, where by a single reference to the registration reports of Massachusetts for 1849 and 1852, he shows that the average *age at death* in the town of Brighton is 23 years and in Cambridge 21 years, and seeing no difference between the average age at death and of life, states the average of life to have been in Cambridge 21 years, and hence from my tables there has been a most marked increase in the longevity of life here during the last twenty years. *Reductio ad absurdum!* But this lesson of figures has a wider and practical bearing, and hence my reason for bringing it to your attention to-day.

It may be well said that the highest duty and most glorious privilege of the medical profession is to teach men to keep well, rather than to cure them when sick; and if it be true that whole communities separated only by arbitrary lines of division, by superior wisdom in selecting their surroundings and by personal care, may live one third longer than their neighbors (as is shown by the previous tables to be a fact in Cambridge), is it not a privilege and duty that we, as guardians of the public health, and to whom the people look for advice, should demand that even the poorest may be exempted from such suicidal fate?

I am aware that this is a question of no simple solution, and that while wealth too often brings with it, possibility of excess which leads to destruction, that poverty, even in our own land of plenty, often limits her subjects, and, hand in hand with intemperance, ignorance and crime, causes direct and large increase in the mortality rates.

I would advocate that our profession, not alone continue teaching sanitary science as applied at the bedside in their daily rounds of labor, but that, as Wendell Phillips would say, we become "*agitators*" upon this subject, until an educated public, alarmed for their own safety, demand that there shall be no embargo upon pure air, good water and healthy surroundings. Let our laws restrain the cupidity or ignorance of builders, and our tenement houses be constructed as safe from danger to life from a sanitary stand-point as from an architectural one. Obliterate the Miller-River nuisance, fill the low lands. Give us good and complete sewerage; good road beds for aid of careful drainage, clean streets, back yards and alleys. Remove every business deleterious to the public health, enforce an improvement or remodelling of the immense slaughtering, rendering, bone-boiling and soap-making establishments until these shall cease to be an injury to the public welfare; and give us, even here in Cambridge, a Board of Health with the knowledge and power to effect such a change.

Before closing, allow me to say we have reason for encouragement in the progress of the present. In New York, probably the dirtiest great city in the civilized world, the Metropolitan Board of Health has accomplished prodigies in cleaning this Augean stable.

Every physician must needs feel proud of the work so carefully and conscientiously done these last four years by our own State Board of Health. From the result of its labors already it is safe to say, the state financially never made a better investment, and, in its future results and indirect bearing upon the life and happiness of its every inhabitant, it is difficult to over-estimate its value.

The Board of Health recently appointed in Boston has inaugurated its work most grandly, by the active measures which so soon aided in subduing our late epidemic of smallpox, and there is room for it to be but the beginning of better things in its march through the lower quarters of the city at the north and west end.

Cambridge is now liberally filling in her worse than waste and desert places, and the lesson both in trouble and expense should prevent the opening of more streets, with a level below tide water, no drainage, every square foot reeking in moisture, and soon, if occupied, to be putrefying with animal and vegetable decomposition.

But, as has already been shown, our necessities for further improvement are pressing; and I appeal to you if it should remain a fact, that a city of less than 50,000 inhabitants, occupying so large a territory and situated so advantageously as Cambridge is, possessing very few paupers, eminently prosperous in business, representative largely in both wealth and culture, should compare unfavorably in her mortality rates with London, situated upon the Thames with her 3,000,000 inhabitants, a considerable percentage of whom are subject to the vital depression caused by a degree of want and misery unheard of in America.

Cambridgeport, April, 1873.

Progress in Medicine.

REPORT ON DERMATOLOGY.

By James C. White, M.D.

[Concluded from p. 576.]

Anatomy and Physiology.

Experiments upon covering Animals with Substances which prevent the escape of Perspiration.—Socoloff. *(Archiv für Derm. und Syph.—from Centralblatt*—Erstes Heft, 1873.*)* The results of his experiments in covering animals with varnishes were as follows:—1. Some hours before their death, clonic and tonic spasms in various groups of muscles were noticed, while the temperature in the rectum was considerably lowered. 2. Wrapping the animal in wadding did not succeed in raising the temperature *in recto* or in delaying the approach of death. 3. The inhalation of oxygen could not preserve the varnished animal from death. 4. In the stomach there were found ulcers, in consequence of deep extravasations. 5. Albumen was found in the urine very soon after the skin was varnished. 6. A diffused parenchymatous inflammation of the kidneys was constantly noticed, as well after the use of balsamic preparations (varnish, asphalt dissolved in turpentine), as of indifferent substances (glue, gum Arabic).

Transplantation of Skin. Menzel (*Wiener Med. Wochenschr.* in *Archiv für Derm. und Syph.*, Erstes Heft, 1873) reports upon the results of this operation in Billroth's clinic in Vienna. In large wounds more than twenty bits of skin were transplanted at once, and they were perfectly healed within two weeks. The grafts succeeded when taken from amputations which had lain for hours. The ordinary size of the fragment taken is one centimetre in length, one-third to one-half a centimetre in breadth, and as thin as possible. Grafts upon entirely fresh wounds have not yet adhered.

On the Structure of the Capillary Lymph-vessels of the Skin. Neumann. *(Archiv für Derm. und Syph.*, Erstes Heft, 1873.) 1. According to Neumann's investigations, the lymph-vessels of the skin form an enclosed tubular system, with independent walls, the inner surface of which is lined with flat epithelium. These walls are nowhere interrupted by stomata, so that there is no communication between them and the so-called juice canals or other interstices of the cutis. Neither can any gaps in the epithelium be discovered, even in diseased processes followed by enlargement of the vessels. 2. The relation of the capillaries of the blood to those of the lymph is only so far constant that the first always lie much nearer the surface than the latter. Deeper down, the branches, together with the respective mesh-work proceeding from each, cross each other in the most various directions. Nowhere was any second vessel within one of the lymph tubes to be seen, so that there can be no question about invagination. 3. The lymph-vessels form two distinct and thick networks in the cutis, the deeper of which is more ample than the superficial. Their walls are capable of great dilatation. The upper vessels are, in general, thinner; the deeper thicker, and, like the first, to all appearances without valves, which only become plainly visible in the subcutaneous vessels. The large lymphatics possess many branches of various width, which end blindly. They penetrate the papillæ of the skin, partly as simple tubes, partly as loops. 4. The hair-follicles and sweat-glands present about their periphery, but are not penetrated by, special lymph-capillaries. They surround the fat lobules in a similar way. In the subcutaneous fibrous tissue the vessels are largely developed. 5. The number of the lymph-vessels varies in different parts of the skin, the most occurring on the scrotum, the labia majora, the palms of the hands and soles of the feet. 6. In portions of the skin altered by disease, an enlargement of the vessels may be observed. 7. In ulcerative processes they are destroyed, but are capable of regeneration; and they occur, though sparsely, in scar-tissue. New growths from their walls he has never discovered. . . . . At the meeting of the Gesellschaft der Aerzte, where this communication was presented, Stricker expressed his doubts as to the existence of such a close system of lymphatics.

Iodide of Potassium eliminated through and decomposed in the Perspiration.—Dr. R. W. TAYLOR, of New York, in the April number of the *American Journal of Syphilography and Dermatology* (1873), reports the case under the title "an unusual feature of Tinea versicolor." The patient, when seen by him, on a hot day in August, had been taking large doses of iodide of potassium for a tubercular syphilide. When the man had taken off his shirt, he found that his back was covered with a dark, bluish-black eruption, and presented the appearance of a skin which had been daubed with ink made of iron and logwood. Other spots, not colored in this way, on the chest, presented the appearances of Pityriasis versicolor, and, on scraping off the scales, he found by the microscope the microsporon furfur in large quantities. It was found that the man was scrupulously clean, and that he had made no application to his back to discolor it. "It remained to be explained, therefore, why the eruption was darkened, and that occurring only on the back. Upon looking carefully at the man's shirt, I found that it was made of very thin, fine linen, which had been slightly starched, and I saw that it was a little stained on its back. This aroused my suspicions. It is unnecessary to add that the weather was terribly hot, and the patient seemed to perspire very freely. Upon inquiry, I learned that the man had been taking large doses of iodide of potassium, and that he had been lying on his back, sweating profusely; so this cleared up the doubt in my mind. Here, then, was a man with a copious eruption of Tinea versicolor, who was sweating profusely, and a portion of his skin was in close contact with a starched shirt. . . . . . The fact that the house physician had seen this eruption when red, shows that the staining went through the stages of red-mahogany color to black."

If the blackening in this case were due to the formation of the purple or bluish-black compound of starch and iodine, as Dr. Taylor believes, two conditions were necessary: first, the elimination of the iodide of potassium by the sweat-glands; and, second, the decomposition of the salt by the perspiration. The first of these, so far as we know, has not hitherto been observed; the second was, perhaps, not impossible through the agency of some of the products of the decomposition of the perspiration and sebum.

The Influence of the Nerves on Nutrition.—Dr. POWER, in an article in the *Practitioner* (February, 1873) on this subject, gives, in relation to the changes which the skin undergoes under impaired nerve action as the result of injury, the observations of Schiefferdecken in six cases of this class. Amongst these were thickening of the skin, accompanied by strong pigmentation and desquamation. With one exception, the finger-nails exhibited a peculiar kind of hypertrophy, being strongly curved or claw-like, with transverse terraces or ridges. In two cases, where the nerves of particular nails appeared to be uninjured, the nails remained normal. The arms, also, exhibited increased hairiness; and, in three cases, there was increased secretion of sour-smelling sweat. In all cases, the temperature of the affected arm was lower than that of the uninjured one. The changes in the nails and the increased secretion of sweat appeared to be connected with certain nerve paths; and these, Schiefferdecken thinks, constitute or represent trophic nerves, whilst the other changes are due to the fact that the muscles being atrophied whilst the supply of blood remains unaltered, vicarious hypertrophy of the skin and epidermoid appendages results. Among other cutaneous affections which have been observed as results of nerve lesion, Dr. Power enumerates erythema, roseola, acne, herpes, urticaria, eczema, and pemphigus.

Untersuchungen aus dem pathologischen-anatomischen Institute in Krakau. Von Dr. ALFRED BIESIADECKI, Professor an der k. k. Universität in Krakau. Mit 11 Holzschnitten. Pp. 116. Wien. 1872.

This little volume contains the results of some of the most important investigations ever made in the pathological and normal histology of the skin. They first appeared, in part, in the Polish language, but as the author thinks they have not attracted due attention in their original form, he has republished them in German in the city where he formerly gave instruction in this department to so many of our students abroad. Among the seven papers the book contains, but three belong strictly to dermatology, as follows:—1. On the physiological and pathological anatomy of the lymph-vessels of the human skin; 2. On the anatomy of Lichen exudativus ruber; 3. On the formation of blisters and the regeneration of epithelium on the web membrane of the frog. The first of these was noticed in our last semi-annual report, the latter in another connection, so that we call attention to the book only that those interested in the subject may know where they may obtain the full text of these highly valuable contributions.

SPECIAL DISEASES.

Periods of Infection in the Exanthemata.—Dr. WM. SQUIRE made a communication to the Epidemiological Society of London on this subject (*British Medical Journal*, April 26, 1873), in which he divides epidemic diseases into two classes, as their period of incubation is long or short, taking smallpox as the type of one and scarlet fever of the other. In smallpox it was not likely that, for the first week or ten days after exposure, a person had himself become infectious, but facts were adduced to show that infection was set up certainly two days before the eruption appeared. The eruption of smallpox appeared nearly a fortnight after infection, so that a person exposed to infection cannot be considered safe to those around him until after this interval has passed. In measles the same time must be allowed, although the eruption generally appears in less time, from ten to fourteen days. Many cases of measles show that it is in the catarrhal stage, the so-called sickening for measles, that the infection is spread, from two to three days before the appearance of the rash. On the outbreak of measles in a family, it is too late to expect to prevent its spread to others, if they have been with those sickening until the rash appeared. Though infection might begin in diseases of this class before the more prominent signs of the disease were declared, yet it did not persist so long as in some diseases of the other division. In scarlet fever, instances were given where infection was communicated by personal contact sixty-six and seventy days from the commencement of the complaint, or from six to seven weeks after the specific illness was over, while in measles it was generally sufficient to allow three weeks after it for infection to clear off.

Injection of Vaccine Lymph into the Subcutaneous Cellular Tissue.— In connection with the question of the possibility of vaccination through such attempted inoculations, lately discussed in this Journal, the results of some experiments by Senfft, as communicated to the *Berlin. Klin. Wochenschrift (Archiv für Dermat. und Syph.*, Erstes Heft, 1873), are of interest. Injections of pure cow lymph, or of lymph one half diluted with distilled water, into the subcutaneous cellular tissue on the abdomen in calves, and one injection of human vaccine lymph, had a negative result. On the other hand, all seven animals were subsequently successfully vaccinated. Injections of animal lymph into the abdominal veins, or directly into the abdominal vessels, of calves, were wholly without result.

Smallpox in Berlin in 1871.—*(Archiv für Derm. und Syph.*, Erstes Heft, 1873, from *Vierteljahrschr. für ger. Med.)*—From Müller's report on this great epidemic, the following interesting facts are taken. In 1864, an epidemic occurred, destroying 620 persons, the largest number of deaths from the disease in any one year up to that time. In 1870, the deaths were 172 only, but in the frightful epidemic of the following year 3,552 persons died of smallpox in the city, and the number of cases of the disease was 17,074. The mortality, therefore, was 20·8 per cent. From the tables which accompany the report, it appears that the disposition to the disease is greater in the first year of life, and diminishes up to the fifteenth, from which period (owing to a loss of the protective power of vaccination) it again increases. The mortality is least between the tenth and twentieth years, and then again increases with the diminution of vaccine protection. Of those who had the disease, 2,731 had been vaccinated; of those who died, 1,133 had been vaccinated; so that the mortality among the vaccinated was 15·74 per cent., among the non-vaccinated 41·48 per cent.

On certain Affections of the Skin occurring in Pregnancy, Childbed, and in connection with Uterine Diseases.—Prof. Hebra in the *Wiener Med. Wochenschr. (Archiv für Derm. und Syph.*, Erstes Heft, 1873*)*, after mentioning chloasma, acne, eczema, pruritus, erythema, urticaria, and pemphigus as the affections most common to these conditions, describes an eruption which he has had opportunity to observe in five cases during pregnancy and childbed. It consists of pustules characterized by the early purulent nature of their contents, their arrangement and peripheral extension. In nearly every case, the first efflorescences showed themselves upon the inner surface of the thigh in the form of pustules of the size of a pin's head, arranged partly in groups as large as a two-cent piece, partly isolated, which soon, by fresh outbreaks at the periphery, formed circles or concentric rings. Within a few days the number of groups increased, the circles enlarged, and fresh isolated pustules constantly appeared, so that gradually the legs, abdomen, chest, arms, hands, feet, and finally the back, neck, face and scalp appeared covered with such groups. While the pustules in the centres of these groups were drying up into flat and dark-brown crusts, new efflorescences, filled with yellow purulent fluid, were constantly developing around their borders, thus imitating the appearance of a herpes iris or circinatus. Inasmuch, however, as it is not groups of vesicles, but of pustules, which characterize the beginning of the disease, while its course is not acute, but marked by constant fresh outbreaks, we are not able to arrange it under the genus Herpes in spite of its striking resemblance, but are obliged to give it a name suitable to a pustular eruption, and to recognize it in accordance with the custom of nomenclature as a sort of Impetigo. Inasmuch, too, as the pustules group themselves in circular form, as in herpes circinatus, we must select for its title Impetigo herpetiformis. The eruption was accompanied throughout its whole course by intense fever and great prostration. In three of the cases observed, successive outbreaks showed themselves with greater or less rapidity to the end of life, while in the other two cases, after the groups and circles of pustules had existed for several weeks, all the efflorescences dried up, and the thick crusts, when they finally fell off, left behind them healthy but strongly pigmented skin. In some cases, on the contrary, the pustules did not dry up on all parts of the skin, but their epidermal coverings softened into a gray, stinking pap, which rested upon a red and moist base, especially about the flexures of the joints, and gave the disease an eczematous appearance. Ulceration never occurred, however, but the patches either remained in this eczema-like condition, or the secretion, consisting of epidermis, blood and purulent elements, with abundant fat, dried in the form of crusts of various colors, beneath which the normal epidermis was restored. Only in one case, and after repeated relapses, did recovery occur; the other four cases proved fatal. The general symptoms were, chills before each successive outbreak of the efflorescence, which ended in a considerable degree of fever of several days' duration. The urine was always acid, particularly dark in color, and contained a few pus corpuscles, much urea, but no albumen. Three of the patients had been delivered from two to five weeks before their entrance into the hospital, while the other two came for treatment in the last month of their pregnancy. The appearances upon the skin were the same both before and after delivery. A *post-mortem* examination was made in the four fatal cases, but no positive cause of death and no puerperal process was discovered, neither was there was anything in the constitution, circumstances, or previous health record of the patients to account for the disease. Syphilis could be positively excluded from every case. For want of other ætiological grounds, and in consideration of the fact that all the cases occurred in the pregnant and puerperal state, Prof. Hebra is inclined to the opinion that Impetigo herpetiformis is caused by some morbid change in the genital apparatus.

In commenting upon this disease, Auspitz calls attention to two cases described by him in the first volume of his *Archiv*, under the title Herpes vegetans, which he considers identical with those of Prof. Hebra.

One of the cases occurred in private practice and also proved fatal; the other was probably one of those above described, so that of six cases five died.

Lichen hypertrophique of Hardy.—CHARPY (*Annales de Dermat. et de Syph.*, tome quatrième, No. 1) gives the results of his microscopic examination of two cases, one of them ulcerated, of the affection thus named by Hardy, from which he draws the conclusion that the process is not an inflammation, but a tumor. This is shown, he thinks, by its clinical history on one side, its development by friction or spontaneously, its limitation, its slow course, its resistance to all treatment, except its destruction by caustic or excision; on the other side by its anatomy, the elevation which its hypertrophied tissues attain, the development of the horny layers, the verrucose complications, and the destruction of the glands. This tumor being constituted by an increase of all the layers of the skin, he regards Lichen hypertrophique as a papilloma.

The Relations between Lupus, Scrophulosis and Tuberculosis.—(*Archiv für Dermat. und Syph.*, Erstes Heft, 1873, from *Centralblatt.*)—From examinations of extirpated portions of the exfoliating and hypertrophied forms of lupus, Friedländer finds that lupus tissue belongs, in general, to the class of fibrous structures, consisting, that is, of cells in an intercellular substance. Of the cellular elements he recognizes three forms:—

(a.) Small, round cells, with little protoplasm around the relatively large nucleus (common granulation cells);

(b.) Cells four times as large, with a relatively small nucleus and transparent protoplasm, but slightly tinged by carmine;

(c.) Typical giant cells (Riesenzellen) with very numerous nuclei, mostly situated about the periphery.

Morphologically considered, intermediate forms between a and b, as well as between b and c, are found. The arrangement of the cells is not wholly regular, although, in general, the granulation cells occur more often at the periphery, the giant cells in the centre of the lupus tubercles.

This result suggests very closely the structure of the smallest tubercle nodules, as described by Schueppel, from scrofulous lymph glands, as well as of the miliary tubercles of various organs, and other scrofulous processes. Friedländer concludes that a much more intimate connection between scrophulosis and tuberculosis exists than has hitherto been admitted; and, also, that lupus stands in a very close relation to these affections histologically and clinically. The histological identity of lupus and scrophulosis was shown by Auspitz in 1864.

The Pathology of Leprosy.—At a recent meeting of the London Royal Medical and Chirurgical Society (*British Medical Journal*, April 26, 1873) a communication from Dr. H. V. Carter, of the Bombay Army, on leprosy in India, was presented. He believed that neither climate nor endemic influences had been shown to favor or check the prevalence of the disease; faults of diet, hygiene or habit equally failed to account for its varied distribution. The population generally was affected to the extent of one in about 1000 inhabitants, but the proportion differed in the several races, and hence in localities occupied by those races more predisposed than others. The seat, nature, and causes of the leprous disease were then inquired into. It was affirmed that, so far as manifested, its seat was the cutaneous system, evidence to that effect being negative and positive. The latter included certain interesting features revealed on dissection; thus, the cutaneous nerves were affected only, or chiefly and primarily, in that part of their course between the skin and the deep fascia of the limbs or trunk; and when the deeper-seated nerve-trunks of compound function were diseased, it was only their sensory elements which appeared to be affected, and often those in continuity with skin-nerves. Motor paralysis was seldom marked in lepers who could crawl on, or bend, the stumps, which were sometimes all that remained of hands and feet. He considered that there were trophic nerves in connection with those termed sensory; and that nutrition, as a process, might be directly influenced by the nervous system. It was submitted that all the essential phenomena of the leprous disease might be traced directly or remotely to the characteristic nerve lesion. As to the nature of leprosy, the existence of a dyscrasia or primary blood-change seemed hypothetical and even needless; the proximate cause, it might be said, resided in a faulty condition of certain tissues of the integument. Respecting contagion, or inoculation, as causative influences, the absence of crucial facts was remarked on. Europeans living long in India were virtually never affected with the disease.

Rhinoscleroma.—GEBER. (*Archiv für Dermat. und Syph.*, Viertes Heft, 1872.)—This affection, a new formation on the nose, was described and named by Hebra in 1870, and a full account and picture of the same may be found in the last Lieferung of Virchow's Handbuch, Hautkrankheiten, by Kaposi. After a thorough observation of three cases, Dr. Geber, assistant in the skin clinic at Vienna, contributes a clinical-histological study with regard to its nature. As the result of his microscopic examinations, he concludes that the changes in the affected tissues consist in a diffuse new growth of fibrous tissue abundantly infiltrated with cells, and gives two illustrations of the anatomical appearances by Heitzmann. From carcinoma, it differs both clinically and histologically. Occurring always at middle age, it often dates back to the period of puberty, and, after a growth of many years even, produces no ill effect upon the system at large, nor are the nearest glands secondarily affected. Ulceration never occurs after cauterization or cutting, but the tissues heal as readily as those of the healthy parts. Consisting, in the main, of granulation cells and an abundant growth of fibrous intercellular substance, its anatomical elements, also, are not those of carcinoma, but of a chronic inflammatory process simply. Just as eczema, for example, is capable, after long duration, of producing an elephantine enlargement of the skin, so this affection Dr. Geber is led to regard as an infiltration and proliferation of the mucous or submucous tissues in consequence of some chronic irritation of an inflammatory character. He considers the affection described by Weber in his treatise on the diseases of the nasal cavity as Perisarcoma to be the same.

Prognosis of Warts.—Mr. HULKE (*Medical Times and Gazette*, Jan. 11, 1873), in a clinical lecture on rodent cancer, draws the following conclusions:—1. Not to think lightly of small, hard pimples and warts on the face of persons advanced in life, but promptly and thoroughly to excise them, especially if they show a tendency to grow, ooze and scab. Their complete excision, together with a broad fringe of sound tissue, will probably secure a future immunity. It is advantageous to close the fresh wound, when large, with a flap of sound skin from an adjoining part. 2. Never try to destroy them with nitrate of silver, as is too often done, because its action is too superficial, and its use seems often to hasten their progress. 3. When the surface of the ulcer is so irregular that complete excision is impracticable, it should be supplemented by burning freely with a hot iron those parts which could not be reached with the knife, and by the free application to them of the chloride of zinc paste. 4. Some apparently desperate cases, at an advanced stage, may thus be treated very successfully, if the patients possess confidence and docility. 5. Such composite operations are well borne by persons in advanced years, if care be taken to avoid much bleeding.

(Care should be taken not to confound with the above growths simple sebaceous warts, which, although often crusted and suspicious looking in old persons, are generally easily removed or kept under by the frequent use of sweet oil and soap alone.—J. C. W.)

Epithelial Cancer of the Skin.—(Archiv für Dermat. und Syph.) **Bergmann** publishes, in the *Dorpat. Med. Zeitschrift,* an analysis of 261 cases of this affection observed in the local clinic. Of these, 143 were upon the under lip. Comparing his cases with those of Thiersch, Billroth and others, he finds that 81·57 per cent. were males, and 18·43 per cent. females. The greatest number of cases occurred between the 50th and 60th years of life. As to the results of treatment, 117 of the cases only were kept under observation long enough to warrant any conclusion in this respect. Of this number, 57 exhibited a return of the affection after operation. Those who lived more than three years after extirpation, without a relapse, were considered cured. The number of these was 20, while 13 others lived more than three years, and died of other causes. Number of deaths after operation, 19. The percentage of cures was 28·20, and of relapses 57,25, which he regards as unusually favorable.

On the origin of Cancer.—Dr. **Ogston**, of Aberdeen, in the April number of the *Edinburgh Medical Journal,* publishes a paper on this subject, in which he is inclined to the opinion of Billroth and Waldeyer, that cancer always has its origin in epithelium. In addition to, and in support of, their arguments, he has noticed that epithelium, even though not actually cancerous, is in an abnormal state of hyperplasia, and seems ready itself, by a slight increase of activity, to reproduce the disease when the chief forces have been removed, or to participate in its extension when allowed to remain. In cutaneous cancer, he finds the Malpighian layer is mainly affected in the epithelial hyperplasia; without multiplication of the nuclei of its cells, it is thickened and more succulent; it supports the likewise thickened layer superficial to it, and is accompanied by increased proliferation in the epithelial appendages of the skin. The sweat ducts are in a state of enlargement, plainly due to the hyperplasia of their epithelial linings, and the hair follicles, from a similar cause, are large and longer than usual, extending into the skin and subcutaneous tissue to an unwonted depth. The hairs are more brittle than normal. The papillæ of the skin are not hypertrophied nor separated by hypertrophied epithelium to the extent seen in epithelial cancer proper, a marked distinction between the latter and other forms.

Porrigo decalvans.—Dr. Dyce Duckworth, of Edinburgh, contributes to the eighth volume of *St. Bartholomew's Hospital Reports* (1872) a very valuable paper on the nature and treatment of this affection. Dr. Duckworth is not a believer in the parasitic nature of the disease, and his article is written mainly in support of his opinion upon this point; but, instead of attempting to persuade his readers that there are no grounds for the opposite belief, and that there is nothing to be seen in or about the hairs resembling parasitic elements excepting sebaceous matter, he does describe appearances which closely resemble the spores of a fungus, and not only describes but figures, in several admirable plates, appearances which, we doubt not, if shown to a non-believer, ignorant of what they are intended to illustrate, would at once be pronounced excellent representations of fungus growth in hair. The appearances he describes as innumerable, bright, refracting granules, varying somewhat in size, but mostly round or oval, which closely invest the hair, and are especially noticeable where the hair is broken off, and in the stumps which are to be seen near the edges of the bald areas. Later, he says, the shaft appears as if overgrown with these granules, presenting the aspect of an old tree invested with moss and lichens. These appearances he has never failed to find, he states, in any case of porrigo decalvans, and calls them oleo-granular matter, likening them to the natural pigmentary matter found in normal hair cells. These granules he has failed to make grow in glycerin or on strips of apple, and he finds that they are soluble in ether. He has never found a single element in any instance which he thinks could be rightly termed fungous or parasitic; and as he does find these, and easily, in favus and tinea tonsurans, he refuses to believe that he could miss them in cases of so-called tinea decalvans. The belief, entertained by others, that these bright, refracting granules are vegetable, he accounts for by the fact that they are not easily dissolved by ether, maceration for several days in pure ether failing, according to his statement, to remove them from the root-sheath. The cases of the affection which have seemingly been proved to be contagious, he thinks may be explained by the simultaneous occurrence of tinea tonsurans. He has never seen any of the redness of the scalp at the affected parts which has been described by others as an occasional appearance.

He is disposed to regard the disease as a "nutritional perversion," and thinks the neurotic forms of alopecia are different from true porrigo decalvans. He recognizes two varieties: the first occurs chiefly under puberty in the form of scattered bald spots, which seldom last longer than a year, and in which the prognosis is good. The second rises in the scalp, and may spread indiscriminately. The prognosis is more grave.

Treatment. He does not believe in the efficiency of arsenic in the disease, but is inclined to give the preference, among external remedies, to the application of oil of turpentine, as recommended by Erlach, of Bern, on account of its parasiticidal qualities.

(This, of course, is but a report of Dr. Duckworth's views, and upon one side of the question. They are of real value. Many of his opinions and observations, however, are at variance with those of equally good observers, and are capable, we believe, of refutation or explanation in support of the existence of a parasitic form of the disease also.)

General Therapeutics.

Carbolic Acid, its Internal Use in some forms of Skin Diseases.—Dr. Guntz, of Dresden *(Archiv für Dermat. und Syph.)*, gives us the results of his use of this drug in 150 patients of all ages. Its action in itching of the skin, independent of any perceptible change in its tissues, he praises highly; the trouble sometimes disappearing after a few days even, and in some patients not returning at the end of a year. In many cases, the improvement was only temporary; in others, there was none. In prurigo, a much longer use of the acid was necessary before the pruritus yielded and a favorable change in the skin took place. This improvement first showed itself by the diffused redness circumscribing itself, and being more sharply defined against the paler skin, so that the patient thinks, in the beginning, that the disease is worse. Subsequently the patches, with the diminution of the itching, become paler, the infiltration disappears, and gradually, in the most favorable cases, the skin returns to a healthy state for the greater part. Occasionally, an abundant formation of pustules is observed upon the joints of the arms and upon the backs and palms of the hands before the thickening disappears, which are caused directly by the acid. They must be opened, after which they rapidly heal. Some of the cases of prurigo remained, for months after the treatment, apparently cured; others improved only as long as the medicine was used, the disease increasing as soon as it was omitted. In about half the cases scarcely any, or only the slightest, diminution of the itching and inconsiderable change in the skin followed.

In eczema, improvement was only exceptionally noticed from its use; and, in these cases, arsenic seemed for a time to be more effective than usual, when given subsequently to the carbolic acid. Its beneficial action ceased, however, before the point of recovery. In psoriasis, lupus and syphilis the remedy was powerless.

Treatment of Burns.—Dr. Bruyne, in the *Gior. ital. delle malatt. vener. e della pelle (Archiv für Derm. und Syph.*, Erstes Heft, 1873), gives the preference to the linim. calcis over all other remedies used in burns, attributing to the lime water all the antiphlogistic and antiseptic action it possesses. The addition of the almond oil, which soon becomes rancid upon the wound, he considers entirely useless. The lime water alone, however, has no anæsthetic effect, and requires to be constantly renewed. Both of these objections he overcomes by adding to the lime glycerin and æthyl chloride after the following formula:—Freshly precipitated hydrate of lime, 3 gm. ($CaCl + 3KO, HO = KCl + CaO, HO$); glycerin, 150 gm. To this, after gently warming, chlorinated æthyl chloride, 3 gm., is added. For the latter, can be substituted laudanum or any other stupefacient, but he prefers the æther anæstheticus, as it is scarcely volatile, not irritating, and is rapid in its action. In this a substance is obtained of the consistence of syrup, of pleasant odor and alkaline reaction, with which a fine linen compress is to be thoroughly saturated and then laid upon the wounded surface. Over this, a piece of oiled silk or flannel cloth is to be laid to prevent evaporation.

Treatment of Scabies in Children.—Dr. Monti *(Jahrb. f. Kinderk.* in *Edinb. Med. Jour.*, Feb., 1873), knowing by experiment that copaiva balsam kills the itch insect, tried it in cases in children. After previous washing, it is rubbed in two or three times a day, producing severe redness, which passed off in half an hour. The itching usually ceased after the first inunction, the irritation of the skin diminished, and disappeared entirely after three or four inunctions. The cure was in every case complete. The duration of the treatment varied from two to twelve days. It is cheaper than Peruvian balsam, has a pleasant smell, and does not soil the linen; and is, especially for infants, preferable to sulphur. Carbolic acid, in solution, fifty-six grains to the pound of water; or, as ointment, fifty-six grains to four ounces of simple ointment. After first cleansing the skin, use it as a wash, or inunction. It produces slight burning and redness, which soon disappear. In all the cases so treated, complete cure was affected, generally after six to nine inunctions, within two to four days; if eczema exist with it, it is generally longer, about twelve days. The author never observed poisoning; it produces no eczema, is very convenient, and less costly than copaiba or Peruvian balsam, and has the advantage over styrax that the linen is cleansed and purified.

Reports of Medical Societies.

MASSACHUSETTS MEDICAL SOCIETY.

First Day's Proceedings.

The anniversary meeting of the Society began on Tuesday, June 3d, in this city.

The morning hours of that day were occupied by visits to the wards and operating-rooms of the Massachusetts General Hospital and of the City Hospital.

At noon, the Fellows assembled in the hall of the Lowell Institute. Dr. B. E. Cotting, the Vice President, occupied the chair. Papers on medical and scientific subjects were read as follows:—

1. Lewis S. Dixon, M.D., Worcester, *Improvement in the Treatment of our Ophthalmic Cases.*
2. Nathan Allen, M.D., Lowell, *Hereditary Disease.*
3. John O. Webster, M.D., Lynn, *Children's Diseases in Massachusetts.*

At a quarter past one, P.M., the Society took a recess of two hours, after which it listened to the following:—

4. Frederic I. Knight, M.D., Boston, *The Treatment of Growths in the Larynx with the Aid of the Laryngoscope.*
5. Frederic Winsor, M.D., Winchester, *The Duties of Physicians to Nurses.*
6. Alfred Hosmer, M.D., Watertown, *Life and Disease.*
7. J. F. Alleyne Adams, M.D., Pittsfield, *Notes on the Pneumogastric.*
8. Melville E. Webb, M.D., Boston, *Report on the late Epidemic of Smallpox in Boston.*

At the conclusion of Dr. Winsor's paper, Dr. H. I. Bowditch, of Boston, offered the following resolution, which was adopted:—

Resolved, That a committee of nine be appointed to urge on the great hospitals of Massachusetts the importance of establishing in connection with these institutions schools for nurses, similar to that in St. George's Hospital, London, and more recently in similar institutions in New York.

The committee was appointed by the chair, and consisted of Drs. Winsor of Winchester, Bowditch of Boston, Wheeler of Chelsea, Peirson of Salem, Fiske of Northampton, Gage of Worcester, Holmes of Milton, Nickerson of Lowell, Stone of Wellfleet.

Dr. Gurdon Buck, of New York, who has devoted special study to the subject of reparative surgery, was introduced to the Society, and gave an interesting description of his method of treatment, illustrated by specimens. A vote of thanks was presented to Dr. Buck for his instructive remarks.

At 6, P.M., the Society adjourned.

COUNCILLORS' MEETING.

At half past seven in the evening, the Councillors of the Society, to the number of eighty-nine, assembled at the rooms, No. 36 Temple Place. The President, Dr. George C. Shattuck, occupied the chair.

The record of the last meeting was read and accepted.

Various committee reports were presented and accepted.

The following standing committees were appointed by the President:—

On Publications.—G. C. Shattuck, B. E. Cotting, C. Ellis.

On Resignations.—J. Ayer, F. Minot, J. C. White.

On Finances.—G. H. Lyman, C. D. Homans, W. W. Wellington.

On procuring Scientific Papers.—H. W. Williams, C. E. Buckingham, G. H. Lyman, C. D. Homans, E. J. Forster.

The following officers were elected by ballot:—

President, Dr. G. C. Shattuck.

Vice President, Dr. B. E. Cotting.

Corresponding Secretary, Dr. C. W. Swan.

Recording Secretary, Dr. F. W. Draper.

Librarian, Dr. D. H. Hayden.

Treasurer, Dr. F. Minot.

Orator, Dr. Nathan Allen.

Anniversary Chairman, Dr. R. L. Hodgdon.

Committee of Arrangements, Drs. R. Amory, A. H. Nichols, C. J. Blake, T. Dwight, Jr., J. C. Warren.

A committee to whom, at the last meeting, was referred the matter of procuring a legal opinion concerning the right of the Society to admit females to its membership, reported an opinion of legal counsel that there was no obstacle in law to such membership. After considerable discussion, it was voted that the Censors of the Society be instructed not to admit females to examination as candidates for admission to fellowship.

After the close of the meeting, the Councillors proceeded, by invitation, to the house of Dr. G. H. Lyman, where, with several other medical gentleman, they were very handsomely entertained.

SECOND DAY'S PROCEEDINGS.

The Society assembled at 10 o'clock, A.M., in the hall of the Lowell Institute, on Wednesday, June 4th, for the exercises of the annual meeting. The President, Dr. George C. Shattuck, occupied the chair.

The Secretary's record of the last annual meeting was read and accepted.

The Secretary, Dr. Swan, then read the records of the Board of Trial in the case of Dr. James Howarth, of Andover, and of Drs. Bushnell, Fuller, Hoffendahl, Russell, Talbot, Thayer and West; the judgment in the case of Dr. Howarth was for acquittal, that in the cases of the other named Fellows was for expulsion.

The Secretary moved the acceptance of the records and report of the Board of Trial, and that the following vote be passed:—

Voted, Upon the report of the Board of Trial for the trial of the charges against William Bushnell, Milton Fuller, Herman L. H. Hoffendahl, George Russell, Israel T. Talbot, David Thayer and Benjamin H. West—that the said William Bushnell, Milton Fuller, Herman L. H. Hoffendahl, George Russell, Israel T. Talbot, David Thayer and Benjamin H. West *be and are* expelled from the Massachusetts Medical Society.

The President explained that the motion was presented in order that any legal objections or technical obstacles might be removed, in view of the possibility that the case might be again brought before the courts.

He further stated, in answer to questions, that the sentence of expulsion passed by the Board of Trial was not signed by all the Board because the fifth member was detained by the imperative exigencies of a patient; and that the persons designated in the vote had not been originally received as members of the Society with the knowledge that they were homœopaths.

Without further discussion, the question, being called for, was carried with but one dissenting vote.

On motion of Dr. B. E. Cotting, it was voted that when the meeting adjourned it be until the first Wednesday of October next, at 3, P.M., at such place as the Councillors' meeting on that day may be held.

The report of the Treasurer, Dr. Francis Minot, showed the receipts of the year to have been $9,683.38; expenditures, $9,400.74—leaving a balance of $282.64 on hand.

Dr. B. Joy Jeffries made a personal explanation, denying the authorship of an article in relation to ether, published in the last number of *Braithwaite's Retrospect* and attributed to him.

The reading of scientific papers being resumed, Charles L. Pierce, M.D., of Natick, read a paper entitled "How shall we warm our houses?"

Dr. Henry W. Williams, of Boston, after sketching briefly the various operations for cataract which have been practised, described and demonstrated the new operation known as Liebreich's.

Mr. A. Graham Bell, of Boston, late of Edinburgh, read a paper on the physiological aspects of the system of visible speech, invented by his father and applied in teaching deaf mutes to speak. He illustrated the system by the aid of several of his pupils, who had been in training for a longer and shorter time. The exercise was of uninterrupted interest.

At one o'clock, Charles E. Buckingham, M.D., of Boston, delivered the annual discourse. At the beginning, he briefly reviewed the history and objects of the Society. It existed by an act of the Commonwealth, not for money-making, but for the advancement of medical science, the health and good of the public, and its protection from quacks and tricksters. Its members were not bound down to any specific cure or mode of practice. They should receive instruction from any one whose opinions were entitled to respect. Discussion and research were duties which they ought to perform. They agreed in ignoring theories unsupported by facts, and were willing to listen to any one of experience whether they agreed with him or not. Medicine, he continued, was not the only curative power, and were it to-day proved useless the physicians would still have enough to do; and, after stopping to class all those who pretended to cure by any one method, by spiritualism, homœopathy, allopathy, or any other dogma, as mere quacks, he mentioned as one of the many things to which the physician could turn his attention, the subject of mortality among infants. A consideration of this occupied the remainder of his discourse. He thought half the deaths of infants were occasioned by disease of the digestive organs, caused by the substitution of artificial for natural nutriment. The carelessness of mothers in the dress of their children was also severely commented upon. The address occupied an hour.

The thanks of the Society were tendered to Dr. Buckingham, for his exceedingly original, learned and common sense address.

At 2 o'clock, the society adjourned, to partake of the annual dinner in Music Hall, the Fellows, to the number of about six hundred, passing into the hall according to seniority. Music was furnished by the Germania Band.

After grace was said by the Rev. Dr. Todd, of Pittsfield, the company spent an hour at the repast.

The anniversary chairman, Dr. Oscar C. DeWolf, of Northampton, made an introductory address of welcome, and congratulated the Society on the fact that it had won the respect of the profession throughout the world, by its successful endeavor to maintain its traditional dignity and integrity.

He announced as the first toast: "The Massachusetts Medical Society; established a century ago, for the development and maintenance of medical science; composed of practitioners of medicine to whose talent, charity and fidelity every hospital and by-way, and the poor on the hillsides and in the valleys of the Commonwealth bear daily testimony; is fitly represented by a gentleman whose philanthropy, benevolence and social virtues are recognized by all, and who is regarded by all as a worthy successor of the many illustrious men who have preceded him in the chair he occupies."

Dr. George C. Shattuck responded with an allusion to the excellent organization of the Society. They had been called upon to perform a painful duty in the enforcement of discipline for the honor and benefit of the Society. He bore witness to the great patience, charity, ability and zeal with which the Board of Trial had performed their difficult duty.

The next sentiment, to the "Commonwealth of Massachusetts," was responded to by His Excellency Gov. Washburn, who said he was present to testify his interest in the Society, which embraced the best members of the profession in the Commonwealth. He spoke at length upon the progressive education of the present age in all the professions, and the growing necessity for special preparation for each of the professions. The coming test of men would be, not what they profess they can do, but what they are doing to make the community in which they live better.

The next toast was:—

"The health of Dr. Jacob Bigelow—A veteran in the medical profession. May his years be long, and his life, in the future as in the past, be prosperous." In response, the band played "Auld Lang Syne."

"Harvard University, first and foremost of the seats of learning in this country—It has won the gratitude of the medical profession for the new and more systematic method of medical instruction under its present administration," found a response from President Eliot, who thanked the Association for their support, and said that the new plan had worked to the entire satisfaction of all. He complimented the profession upon their thorough scholarship and the fact that they were the daily scientific instructors of the household and its defenders against superstition. Superstition, ignorance and idolatry were all around us, and jostled science in modern society in the idolatrous faith in a universal specific.

The sentiment to the "clergy" was given, and the chairman called up the Rev. John Todd, of Pittsfield, as a "gentleman who had always been the friend, patron and defender of legitimate, rational and scientific medicine." He was welcomed with a warm round of applause, and said the Society had gone down deep in the hearts of a great people. It took more to make a lawyer or doctor now than it had in any previous generation, and they could have no higher ambition than to hold up the flag of the fathers, which had health within its folds.

Dr. Charles E. Buckingham, the Orator of the day, was called out, and made a pleasant speech.

Ex-Mayor Shurtleff responded for the "City of Boston," and spoke of the Board of Health, which had done its duty so manfully and fearlessly; he paid a high compliment to the energy and efficiency of Mayor Pierce.

"The physician a hero, when in his official capacity and from a high sense of professional duty he boldly confronts the 'pestilence that walketh in darkness and the sickness that destroyeth in the noonday.'" The chairman announced as the respondent, Dr. Samuel A. Green, Boston's City Physician, who had during the past winter distinguished himself and honored the profession for the ability with which he treated the hideous epidemic which prevailed in this community.

In response, Dr. Green spoke of the peculiar and unfortunate sanitary situation of Boston during the past year, an outline of which he gave, and said the whole truth had never yet been told. The city looked to the new Board of Health with strong hope that there should be no renewal of the epidemic.

"The Country Doctor" met with an eloquent response from Dr. S. K. DeWolf, of Chester.

Dr. Henry W. Williams was introduced as one "whose facile hand had given sight to the blind and whose labors had brought honor to the Society in Europe and America," and made a speech in which he urged the importance of individual investigation upon the members of the Society. He said the Society was never so strong as at present, vigilant as it was in the public welfare, which found its reward in the public confidence.

Mr. A. Graham Bell responded pleasantly to a complimentary call from the chair.

Dr. Thomas N. Stone, of Wellfleet, was introduced as "the recent explorer in Utopia," and received a warm welcome. He spoke of the condition of the physicians in Utopia, where there were no medical martyrs, and where, when a physician in a Society differed from his fellows, he just quietly withdrew. In conclusion, he read a poem, which was received with manifestations of pleasure by the auditors and from which we take the following stanzas.

THE TROUBLES OF COPARTNERSHIP PRACTICE.

A DREAM OF RIP VAN WINKLE, JR.

Last night I had a queer, queer dream:
I dreamed the fight was o'er;
The suffrage bill had passed the house;
Woman was slave no more.

My loving spouse was Doctor dubbed,
And a diploma sported;
And like M.D.'s, with shingle new,
All patronage she courted.

The caudle o'er, the good-night said,
The day's toil brought me sleeping;
Gently toward the midnight hour,
Light-footed Time was creeping.

And Mrs. Winkle by my side—
Now taller by a span—
Beneath the weight of honor new,
Was snoring like a man.

I heard a tinkle, loud and shrill,
Ring through our outer hall;
That signal that humanity
Is getting up a squall.

"Wake, Mrs. Winkle," sharp I cried,
"My M.D. Winkle, dear,
The storm roars loud—but louder yet,
That cursed bell I hear."

"Why don't you answer it?" she said,
Shivering 'neath blankets warm,
As louder round our little cot
Howled fierce the wintry storm.

"Not I, my dear; 'tis now your turn,
For I was out last night;
The bill has passed—to midnight nap,
Man now has equal right."

"But then the babe?" "O! Nurse it well,
And leave nurse-bottle here;
I'll snuggle it while you are gone
Upon your visit, dear.

Good night, my dear! My blessing take.
The darling warm I'll keep;
And, 'neath this law of equal rights,
While you must wake, I'll sleep.

But when she's drained the pearly founts
Nature designed for her,
Please put upon her, ere you go,
A change of diaper."

"Not I," she said, "that's now your task,
For that's your equal right;
And you may find, my husband dear,
That two will watch to-night!"

She shut the door, and out she went
Into the night and storm.
I cuddled up our darling babe
To keep her sleeping warm.

But soon the babe began to search
For founts that were not there;
And kicked and squalled in wicked style,
Despite my soothing care.

"Hush-a-by baby," soft I sang,
Sang in my gentlest tone;
But 'bove my bass her treble shrill
Rang out as if alone.

On pillow soft as Queen Mab's throne
The squalling child I set;
I held her on my aching hands
Till both my hands were wet.

I pressed her to my bony breast,
She only squalled the louder;
In vain I gave her pulsatill,
And then a Dover's powder.

Like vestal nun, in robes of white,
I paced that chamber floor;
Sterne's angel dropped a tear upon
The oaths that night I swore.

"Confound the child!" at last I cried;
"Confound these Daniels all,
I'll move amendment to that bill,
No babe at night shall squall.

When next these grannies wise essay
To dub my wife M.D.,
I'll pray Dame Nature that she make
A wet nurse out of me."

Slow came the morn, slower my spouse;
The morning meal was poor;
The babe squalled on, and glad I saw
My dear wife ope the door.

A roguish look was in her eye,
As she smiled on babe and me;
And when she hoped I well had slept,
It looked like irony.

Tinkle, tinkle went the bell,
Breaking this night-mare theme;
I woke and gladly faced the storm,
Thankful 'twas but a dream.

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, JUNE 12, 1873.

THE INTRODUCTION OF ANÆSTHESIA.

WE publish, under the head of correspondence, a letter from Dr. William J. Morton, calling our attention to the late attempt in New York, to give the credit of the discovery of anæsthesia to Dr. Wells, of Hartford. The whole affair is rather curious, but of so little weight and so harmless, except to those concerned in it, that we might pass it by without notice, were it not that as it was in Boston that anæsthesia first became a reality, we feel that we are in some degree responsible for the preservation of the truth concerning it.

On May 21st, ult., Dr. Sims, Prof. Doremus (both former supporters of Morton's claims), and Prof. Hamilton lectured on the subject, giving all the credit to Dr. Wells. None of their arguments are worth quoting; indeed they do not deny that if, after his failure in Boston, nothing had been done by others, the world would have been no better off than if Dr. Wells never had lived. The most astonishing statement made at the meeting is that of Prof. Hamilton, who said he believed that perhaps fifteen per cent. of the deaths from anæsthesia were due to ether.

In 1844, Dr. Wells made a brilliant attempt and failed. In 1845, nothing new was made public. In 1846, Dr. Morton proved that anæsthesia could be induced with certainty and safety for an indefinite time. The New-York *Evening Post* states some points so clearly and correctly, that we cannot do better than quote from it. Concerning the introduction of ether it says:—

"But it was Morton who had the confidence—whether from rashness or knowledge does not matter—in its safety, and the energy and perseverance to insist upon trial after trial till the virtue of the remedy was established to the satisfaction of the medical world and world at large.

"It is the first step that costs and counts, and that step was Morton's. With anæsthesia established as a practical fact, it was easy enough for others to follow with other agents, as Sir James Y. Simpson with chloroform. . . . . Jackson knew, and Wells knew, as many had known before them for twenty centuries, that there was such a thing as anæsthesia, and that it would be a blessed thing for their fellow-creatures to make a practical application of it. Many of them tried to make that application, and establish the fact as a recognised and indisputable addition to human knowledge and universal practice, but failed. The man who did not fail, who not only tried but succeeded, was, if human testimony is to be relied upon, Morton."

The following letter addressed to Mrs. Morton from a surgeon, than whom no one living is more familiar with the history of anæsthesia, contains all that need be said on the subject. It appeared in the New-York *Times* of May 28th:—

BOSTON, May 19, 1873.

MY DEAR MADAM: I received to-day your note of the 16th inst., announcing an effort in New-York to show that Dr. Wells was the discoverer of anæsthesia. If this is the real object, the announcement or advertisement of the meeting does not state it. The gentlemen signers who were led to ask for information upon anæsthesia were probably not aware that they were invited to embark in a reconsideration of the ether controversy—a dispute which was thoroughly investigated and practically settled at the time by those who were familiar with contemporaneous facts, and better than it can be by a generation which has grown up since that time.

Wells, acting on Davy's old and well-known hint that his (Davy's) gas, having relieved his own inflamed tooth, might perhaps produce a further surgical insensibility, tried it and found that it sometimes did so, but sometimes did not; in fact Wells made so many notable failures that he abandoned the gas in disgust and embarked in the picture and other business. If a man who was now to have his leg amputated should inhale this gas from a small bag with the entire uncertainty whether it would or would not be of any service in relieving pain—this would illustrate precisely the extent and character of Wells's so-called discovery. The gas proved in his hands to be wholly unreliable, and as such he dropped it as of no practical value. In fact it was hardly known at any time out of Hartford. Besides, an uncertain anæsthesia had been produced long before, and was therefore not new. Wells made the unfortunate mistake of using a small gas-bag, then commonly employed as it now is for exhilarating purposes. Long after ether was introduced the large gasometer now used by dentists was tried, though not by Wells, and it succeeded, but too late; the discovery of an inevitable and safe anæsthetic (the only one of any value), had been made, and as evidence of its value the whole civilized world, which had ignored the gas process as imperfect and unavailing, at once greeted the ether discovery with acclamation.

Wells, like thousands of other would-be inventors of processes and discoverers of truths, narrowly missed a discovery—but he missed it. He only showed that anæsthesia was possible; but this every body knew before. What the world did not know and wanted was a sure anæsthetic, as well as a safe one, and this want was first supplied by ether. When, after a year or two devoted to the picture business, Wells heard of the invention of the first inevitable anæsthetic, he at once wrote to Morton to say that if ether would really do what he claimed for it, it would make his fortune, thus acknowledging the value of Morton's discovery compared with the uncertain experiments practically abandoned by himself nearly two years before. But, at a later period (nearly two years after he had abandoned the gas for picture dealing, and other more promising business), he was unfortunately induced by the advice of persons in Paris, where he then was, to claim the immense discovery. Wells, like many others, preceded ether inhalation with an imperfect and unreliable or dangerous anæsthesia.

Simpson and a dozen others followed with alleged improvements, and all claimed to be discoverers. But ether first produced what was never known before, and what has not been materially improved upon since, an anæsthesia at once inevitable, complete and safe.

This is what the world is grateful for. These points constitute the discovery of modern anæsthesia; and more than this, I hold that the uncertain anæsthesia by nitrous oxide, which was all that Horace Wells had produced before the discovery of ether inhalation, was then practically, and would be even now, of no value to the surgeon.

Finally, it may be added that Wells was not even the one who improved the gas process and inaugurated the modern and comparatively successful system of the dentists, by substituting the large gasometer for his own small and insufficient gas-bag—thus making nitrous oxide what it has since become as an anæsthetic, viz., useful in dental and short operations, though far inferior to ether, and even dangerous in longer ones.

If the above hasty review of the early history of anæsthesia is of any service to you, it is at your disposal.

Your obedient servant,
HENRY J. BIGELOW.

DRAWING-ROOM DRUNKARDS.—In a recent paper read before the Irish College of Physicians on this subject, Dr. Alfred H. McClintock says: "It is matter of notoriety that the immoderate use of diffusible stimulants has greatly increased of late years, among classes whose education and social condition should have been sufficient preservatives against this destructive vice. It is well known to physicians, that alcoholism is to be met with among the occupants of drawing-rooms as well as the frequenters of tap-rooms. What has so widely spread this pernicious habit among the present generation, it would be difficult to say. Probably more causes than one have contributed to bring it about. I cannot help thinking that the intense strain put on the intellectual faculties in every profession, trade, and pursuit, the mental competition of these days, must create or foster an appetite for diffusible stimulants. Nervous exhaustion craves for the alcoholic stimulus; whereas physical or muscular exhaustion will more eagerly demand solid aliment. Furthermore, to be candid, I must own to a feeling that our own profession is not wholly free of blame in this matter. I know well I am here trenching on delicate ground, but, "*Amicus Plato, amicus Socrates, magis amica veritas,*" and I strongly suspect that the modern treatment of disease by the free use of stimulants, though fulfilling an important therapeutic indication, has occasionally developed a morbid habit or taste, eventuating in moral and physical disease of an incurable kind. I would qualify this, however, by adding that the declaration of inebriates themselves on this point is of no value whatever, as they are notoriously untruthful, and are always but too glad to throw the blame of their evil habit on the physician or surgeon.

"Nearly all the cases of alcoholism which have fallen under my immediate observation were females of the better class in society. All, with scarcely an exception, concealed the habit they had acquired of drinking to excess, so that it often needed a lengthened investigation and a careful analysis of all the symptoms, before any positive conclusion, as to the real cause of the patient's condition could be arrived at.

"All sought medical advice on account of some derangement belonging to the alcoholism, though apparently not themselves recognizing the source from whence their ailments sprang. I should qualify this by saying that a few were brought by friends who had no suspicion of the patients' habits. The intoxicating liquors taken varied a good deal, viz., brandy, gin, champagne, port, sherry, whisky, ale, porter, and, in one case, tincture of ginger—of which her daily allowance, for a length of time, was one pint. This unfortunate lady, who moved in a high circle, and was what is ordinarily called a strong-minded person, eventually died of jaundice, enlarged liver, and ascites. It is very well known that, where the ordinary spirit cannot be obtained, the victims of this passion will not hesitate to drink eau-de-Cologne, lavender-water, sal volatile, compound spirits of lavender, and, in fact, any spirit they can lay their hands on. Most of us here have known, or heard, of the museum porter at one of our schools of medicine, who used to drink the spirits of wine off the anatomical preparations, when he had not the means of buying a more potable description of alcohol. In justice to his palate, I must add that this was before the methylated spirits came into use.

"The ingenuity displayed by many of these individuals to hide the vice, and elude the precautions for keeping away the much-coveted drink, is sometines most curious. For example, a lady with this propensity very strong, was strictly confined to one room by her family, who allowed nothing to enter without its being carefully searched for the contraband article; nevertheless, in spite of all these precautions, she managed to have spirits conveyed to her, not, indeed, in a bottle, jar, or jug, but in the undisguised and unsuspected pôt-de-chambre!"—*London Medical Record.*

Spontaneous Changes in Eggs.—M. V. Gayon, in a communication to the Academy of Sciences of Paris, states that the subject of the putrefaction of eggs has been the subject of numerous important, but sometimes contradictory, experiments. It is, however, very generally admitted that eggs not shaken, neither ferment nor putrefy. 2. That eggs shaken, undergo these alterations within a month. 3. That in no case where putrefaction has taken place are the least traces of organized beings, either animal or vegetable, discoverable. Hence, according to Pasteur, this stands in opposition to the proposition that the destruction of organized matter, and its return to the mineral kingdom, are acts correlated to the development and multiplication of organized beings. Struck with the exceptional nature of this occurrence, M. Gayon has undertaken fresh experiments on the spontaneous putrefaction of eggs, and has obtained results opposed to the above proposition. He finds that, in exposing to ordinary air, at a mean temperature of 25° C., eggs that had not been shaken, some do and some do not putrefy. Again, amongst eggs that had been shaken and similarly exposed some do and some do not putrefy; in the latter case remaining good for several months. Whenever the eggs remain good no trace of organisms could be discovered; on the contrary, in every instance in which putrefaction occurred, numerous microscopic organisms of the family of vibrios, as well as various moulds, were found. The question naturally suggests itself, whence do these organisms come. And he thinks it reasonable to conclude that, in view of the different effects observed in eggs placed under the same conditions, the germs of the organisms that are subsequently found in them preëxist, and in them alone, and that such germs may gain entrance in the oviduct.—*Lancet*, April 12, 1873.

Correspondence.

MESSRS. EDITORS,—A number of leading men in New York lately appeared as subscribers to a request to Drs. Sims and Doremus for "information" on the "subject of anæsthesia," and this announcement was extensively circulated in the New York papers a few days since.

The gentlemen who were thus led to ask for "information" were not generally aware (so I am told by at least one of their number) that the main purpose of the meeting was to announce and urge Horace Wells as the discoverer of anæsthesia. The event proved this to be the fact. The whole proceedings seem to have been "cut and dried" to this end. Full reports appeared in the papers of the next day, with illustrations of the scene and actors in the pictorial papers, while the editorial of one paper at least stated that the controversy had been finally settled by Drs. Sims and Doremus.

The meeting failed to accomplish its purpose. The leading papers pronounced themselves in no undecided manner in opposition to this attempt to make Wells the discoverer. Apart from the able letters from Dr. Henry J. Bigelow in the *Tribune* and also the *Times*, the *World*, in a lengthy editorial, denounced Dr. Sims's unfairness and charged him with a "discreditable perversion of the truth of history." While the *Evening Post*, in more than usually decided editorials, analyzed the claims in the same light. May I particularly call your attention to these editorials, here enclosed, and also that of The *World*.*

But aside from all this unexpected and decided opposition in the editorials of non-medical journals, to Dr. Sims's plan of obtaining a snap-judgment from the laity, were the views of the medical profession. By some of these in New York I found that the occasion was viewed as involving an unprofessional display and publicity, especially as there exists no reason why either of the physicians mentioned should assume the position of experts in a knowledge of the anæsthesia discovery.

I would again call your attention to the prompt criticism which the carefully arranged attempt of Dr. Sims met with in the editorials of leading public journals of New York, as showing the direction in which public opinion is drifting in that city. I enclose to your address the newspapers mentioned.

Very respectfully your obedient servant, WM. J. MORTON, M.D.

No. 1 *Park Square, Boston, May* 31*st*, 1873.

MESSRS. EDITORS,—In the JOURNAL of May 15th, it is stated, in the article on resection of the hip-joint, that the first operation in this country was done by Dr. H. J. Bigelow, Feb. 21, 1852.

This is a mistake. My brother, Oliver D. Wilcox, M.D., of Easton, Pa., now deceased, performed the operation July 16, 1849, upon Richard Bell, of Easton, Pa., a brick-mason, about forty years of age. The disease was far advanced, the head of the femur being fully one half destroyed by caries and the patient much reduced. I cannot say if the acetabulum was involved. The patient made a good recovery in about three months' time; and, a month later, was actively engaged in his trade as master mason. The case was never published. C. A. WILCOX.

Uxbridge, Mass., May 19, 1873.

---

* The papers referred to are the *New York Times*, May 22d and May 28th, the *Evening Post*, May 26th and May 29th, the *World*, May 25th, and the *Tribune*, May 24th.—EDS.

Medical Miscellany.

THE Boylston Prize Committee has awarded a prize of $150 to D. F. Lincoln, M.D., of Boston, for a dissertation on "Electro-Therapeutics;" and one of like value to William C. Dabney M.D., of Charlottesville, Albemarle County, Virginia, for a dissertation on the "Value of Chemistry to the Medical Practitioner."

MODERN INDUSTRY.—A Vienna journal contains the following announcement. "Anna Agrikol, sick nurse, watches dead bodies, repairs straw chairs, applies leeches, and makes pastry desserts, and delicacies."

PULVIS SULPHURIS COMPOSITUS.—Take of sulphur in fine powder, 30 parts; bitartrate of potassa, in fine powder, 60 parts; carbonate of magnesia, in fine powder, 25 parts; sugar, lump, in fine powder, 30 parts; oil of fennel, 1 part. Mix.—*The Pharmacist.*

THE NEW HEALTH DEPARTMENT OF NEW YORK.—Under the new charter, the Health Department will consist of two medical and two non-medical commissioners, the President of the Board of Police to be one of the latter. The Bureaux of Registration and Sanitary Inspection are to be continued.

WE hinted, some time ago, at the propriety of a party for the prohibition of "free pie," but are discouraged by the following extract from the *Nation.*

"It has been discovered in the management of the Holly Tree Coffee Houses, that it is not possible to banish pie from any popular bill of fare in this country. The promoters of some of these useful establishments attempted, in the interest of health, to withhold this seductive compound from their customers, but it would not do, as they are now supplying it. The fact is that even a "movement" against pie would not succeed. If an anti-pie convention were held, it would be "captured" by the bitters and quack-medicine men. The Committee on Resolutions would be composed of Schenck, Drake, Radway, Hostetter, and Ayer. The resolutions would contain no mention of pie whatever, but would in bitter terms denounce dyspepsia and "general debility," and call for "the purification of the blood" and the supply of "tone" to "the system," and the punctual payment of the pensions of the soldiers and sailors. A picture of the goddess Hygeia would adorn the platform, and a nomination to some high office would probably be offered to some noted pie-baker, and the original anti-pie men would then be informed that they were a narrow but honest set of fellows, rather wanting in practicalness, but who had nevertheless "builded better than they knew."

ST. JOSEPH'S HOSPITAL, under the control of the Sisters of Mercy, located corner of Campbell and Pleasant streets, will be opened for the reception of the sick in about a week. Extensive alterations have been made since the purchase of the building, and when thrown open publicly it will be found well adapted for the use it is now to be applied to.

The following gentlemen have been appointed members of the Hospital Staff:—

Director—Very Rev. L. S. McMahon, V. G.
Physician in charge—S. W. Hayes, M.D.
Consulting Physicians and Surgeons—George Atwood M.D., of Fairhaven; J. H. Mackie, M.D.; F. P. Abbe, M.D.
Visiting Physicians and Surgeons—S. W. Hayes, M.D.; G. T. Hough, M.D.; F. H. Hooper, M.D.; H. Johnson, M.D.
Ophthalmic Surgeon—J. J. B. Vermyne, M.D.
[*Evening Standard* of New Bedford, May 31st.]

French Prizes.—The Society of Surgery of Paris has awarded the *Prix Duval* to M. Malherbe for his researches on "The Febrile Condition in Diseases of the Urinary Organs." The Society of Medicine and Surgery of Toulouse proposes as a prize subject for 1874 the following question: "On the purity of the chemical medicines most commonly employed: indicate the most certain and easy tests."

London is now free from smallpox.

NOTES AND QUERIES.

Too good to be kept.—The homœopaths have issued an *ex parte* pamphlet of 60 pages, which they style "Trial, &c." A prominent member of the Massachusetts Medical Society, on reading the pamphlet, and not recognizing its source (as that is concealed), remarked that he thought the *Board of Trial* could have made a stronger case of it! Another member, in similar circumstances, remarked: "Well, I think the Board have shown pretty clearly that expulsion was only *justice*"! If such be the effect of their own version, what would be that of one from the Committee and Board of Trial? M.D.

To "**Inquirer.**"—The Lecture Hall of the Lowell Institute is one of the best *ventilated* halls in the city. Besides unusually large and not very tight windows, it has a constant inflow of fresh air, many cubic yards in a minute, through places prepared for it; and a central exit through the roof of the building, having such strength of current that gas lights are thereby turned from a horizontal to a vertical direction.

The air was so pure in the hall that Prof. Tyndall was obliged to "raise a dust or get up a smoke" in order to successfully perform some of his experiments.

The only complainants known, very few in all, have been over-fatigued or over-sensitive persons, affected by *heat*, when the weather outside was unusually warm, and when there was no artificial heat within the hall, except from the assemblage.

One who Knows.

Married,—At Boston Highlands, June 3, Dr. J. Henry Davenport, of this city, to Miss Elizabeth W. Bacon.

Died,—At Norwich, Vt., on the 4th inst., Dr. Jacob Mitchell, formerly of Chelsea, Mass. aged 70 years 8 months.

Mortality in Massachusetts.—*Deaths in eighteen Cities and Towns for the week ending May* 31, 1873.

Boston, 128—Lowell, 22—Cambridge, 18—Worcester, 15—Charlestown, 13—Lawrence, 13—Fall River, 12—Lynn, 11—Springfield, 10—Salem, 9—Chelsea, 7—Holyoke, 6—Somerville, 4—Milford, 4—Taunton, 4—Newburyport, 3—Haverhill, 2—Fitchburg, 2. Total, 283.

Prevalent Diseases.—Consumption, 58—pneumonia, 19—cerebro-spinal disease, 18—scarlet fever, 11.

Deaths from cerebro-spinal disease:—Boston 4, Cambridge and Worcester 3 each, Chelsea 2, Lowell, Charlestown, Lawrence, Fall River, Holyoke and Somerville 1 each. Deaths from scarlet fever:—Boston 7, Lowell 2, Worcester and Salem 1 each.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

Deaths in Boston for the week ending Saturday, June 7th, 134. Males, 70; females, 64. Accident, 4—abscess, 1—apoplexy, 1—aneurism, 1—disease of the bladder, 1—bronchitis, 4—inflammation of the brain, 1—congestion of the brain, 2—disease of the brain, 8—cerebro-spinal meningitis, 3—cancer, 3—cholera infantum, 3—cyanosis, 2—consumption, 18—convulsions, 4—croup, 1—debility, 2—diarrhœa, 1—diphtheria, 1—exhaustion, 1—erysipelas, 3—scarlet fever, 6—typhoid fever, 2—homicide, 1—disease of the hip, 2—disease of the heart, 5—hæmorrhage, 2—indigestion, 1—inflammation of the knee, 1—disease of the kidneys, 6—disease of the liver, 1—congestion of the lungs, 4—inflammation of the lungs, 13—malformation, 1—marasmus, 2—old age, 2—paralysis, 6—premature birth, 2—peritonitis, 2—puerperal disease, 1—pyæmia, 1—rheumatism, 2—suicide, 2—scalded, 1—teething, 2—tabes mesenterica, 1—trismus nascentium, 1—whooping cough, 2—unknown, 2.

Under 5 years of age, 45—between 5 and 20 years, 12—between 20 and 40 years, 32—between 40 and 60 years, 24—over 60 years, 21. Born in the United States, 86—Ireland, 35—other places, 13.